

IN THE CLAIMS

Please amend the claim as follows:

1. (Currently Amended) An optical add/drop multiplexer for adding or dropping a channel to an optical signal, comprising:

a wavelength-division multiplexer being configured to receive and transmit an optical signal; and having a plurality of demultiplexing ports, each demultiplexing port ~~is-being~~ a path for a demultiplexed channel of the optical signal; and

a plurality of add/drop multiplexers, wherein respective add/drop multiplexers are connected to respective demultiplexing ports—, each of the add/drop multiplexers having a wavelength-independent reflector ~~for-configured to transmitting or reflecting~~ an input channel, wherein each add/drop multiplexers is configured to add and/or drop a channel to/from from the wavelength-division multiplexer using the reflector.

2. (Currently Amended) The optical add/drop multiplexer of claim 1, wherein the wavelength-division multiplexer ~~is-being~~ connected to an optical fiber, being configured to receive[[an]] a multiplexed optical signal, and ~~has~~ having input and output ports as a path for the multiplexed optical signal.

3. (Original) The optical add/drop multiplexer of claim 2, wherein each of the plurality of add/drop multiplexers has a plurality of ports for outputting an input channel to an adjacent lower port.

4. (Original) The optical add/drop multiplexer of claim 3, wherein the optical add/drop multiplexer is connected to an optical fiber on which the multiplexed optical signal is

transmitted.

5. (Currently Amended) The optical add/drop multiplexer of claim 4, wherein each of the add/drop multiplexers is configured to drops a channel by outputting the channel received through a third port connected to the wavelength-division multiplexer to a fourth port and outputting the channel received through the fourth channel to a fifth channel by the reflector; and configured to adds a channel by outputting the channel received through a first port to a second port and outputting the channel received through the second port to a third port by the reflector.

6. (Canceled)

7. (Currently Amended) An optical add/drop multiplexer for adding and/or dropping a channel to an optical signal, comprising:

a first wavelength-division multiplexer ~~for~~ configured to wavelength-division demultiplexing a received optical signal ~~and to providing~~ respective demultiplexed channels to respective ~~demultiplexing~~ ports, each demultiplexing port corresponding to the wavelength of the demultiplexed channel;

a plurality of add/drop multiplexers, wherein respective add/drop multiplexers are connected to respective demultiplexing ports, each add/drop multiplexer having first and second circulators ~~and~~ a wavelength-independent reflector connected between the first and second circulators, ~~for the wavelength-independent reflector being configured to transmitting or reflecting~~ an input channel;

a second wavelength-division multiplexer ~~for being configured to~~ wavelength-division multiplexing a plurality of received channels, the second wavelength-division multiplexer having

a plurality of demultiplexing ports, wherein respective demultiplexing ports are connected to respective add/drop multiplexers,

wherein each add/drop multiplexer is configured to add and/or drop a channel to/from from the wavelength-division multiplexer using the first and second circulators and reflector.

8. (Currently Amended) The optical add/drop multiplexer of claim 7, wherein the first wavelength-division multiplexer is connected to an optical fiber to and being configured to receive a multiplexed optical signal.

9. (Currently Amended) The optical add/drop multiplexer of claim 7, wherein each of the plurality of add/drop multiplexers has a plurality of ports ~~for~~ and is being configured to outputting an input channel to an adjacent lower port.

10. (Currently Amended) The optical add/drop multiplexer of claim 7, wherein the first circulator is configured to drops a channel by outputting the channel received through a first port connected to the first wavelength-division multiplexer to a fourth port and to outputting the channel received through the second channel to a third channel by the reflector.

11. (Currently Amended) The optical add/drop multiplexer of claim 7, wherein and the second circulator is configured to adds a channel by outputting the channel received through a first port to a second port and to outputting the channel received through the second port to a third port connected to the second wavelength-division multiplexer by the reflector.

12. (Canceled)

13. (Original) The optical add/drop multiplexer of claim 7, wherein each of the first and second wavelength-division multiplexers includes an arrayed-waveguide grating.

14. (New) The optical add/drop multiplexer of claim 1, wherein the wavelength-independent reflector is configured such that the transmittance of the wavelength changes according to a control signal.

15. (New) The optical add/drop multiplexer of claim 14, wherein the wavelength-independent reflector is configured such that transmittance of the wavelength-independent reflector is independent of the temperature of the wavelength-independent reflector.

16. (New) The optical add/drop multiplexer of claim 7, wherein the wavelength-independent reflector is configured such that the transmittance of the wavelength changes according to a control signal.

17. (New) The optical add/drop multiplexer of claim 16, wherein the wavelength-independent reflector is configured such that transmittance of the wavelength-independent reflector is independent of the temperature of the wavelength-independent reflector.